

**NRT/KS/19/2194**

**Bachelor of Science (B.Sc.) Semester—VI Examination**  
**ICH-606 : CLINICAL PHARMACEUTICAL CHEMISTRY**

**Optional Paper—2**  
**(Industrial Chemistry)**

Time : Three Hours]

[Maximum Marks : 50

- N.B. :—** (1) All **FIVE** questions are compulsory and carry equal marks.  
(2) Give neat and well labelled diagrams wherever necessary.

1. (A) What is drug ? Discuss the nomenclature of drugs. Explain the drug metabolism. 5  
(B) Explain the determination of sugar in serum. 5
- OR**
- (C) How will you detect the cholesterol in urine ? Explain. 2½  
(D) Explain the red cell count. 2½  
(E) Explain the mechanism of drug action. 2½  
(F) Write a note on metabolism in medicinal chemistry. 2½
2. (A) Give the various causes of insect borne diseases. Explain their prevention. 5  
(B) Explain water borne diseases. What are their consequences ? 5
- OR**
- (C) Explain disorder of digestive system. 2½  
(D) Explain various causes of air borne diseases. 2½  
(E) Write a note on respiratory diseases and their mode of action. 2½  
(F) What are diseases ? Give example of disease. 2½
3. (A) What are antipyretic drugs ? Explain its mode of action and importance. 5  
(B) What is first aid ? Explain basic first aid treatment of shock and haemorrhage. 5
- OR**
- (C) Write a note on anti-inflammatory agents. 2½  
(D) Explain analgesic action of morphine. 2½  
(E) Explain first aid treatment of cuts and wounds. 2½  
(F) Explain general anaesthetic agent with suitable example. 2½
4. (A) What is diabetes ? How can one control it naturally ? 5  
(B) What are sulphonamides ? Explain mechanism of action of 'sulpha' drugs. 5
- OR**
- (C) Explain, how cancer is spread up. 2½  
(D) Explain chemical structure of insulin. 2½  
(E) Write a note on hypoglycemic agents. 2½  
(F) Explain common causes of cancer. 2½

5. Attempt any **TEN** of the following :

- (i) Name the chemical reagent used in estimation of Haemoglobin.
- (ii) Define pharmaceutical chemistry.
- (iii) Define red blood cell.
- (iv) What is the main reason of disorder of nervous system ?
- (v) Give the name of air borne disease.
- (vi) What is respiratory system ?
- (vii) What is meant by local anaesthetic agent ?
- (viii) Give the chemical structure of paracetamol.
- (ix) Give the side effect of morphine.
- (x) What is chemotherapy ?
- (xi) Give the structural formula of sulphonyl urea.
- (xii) What is the role of Biguanides drug ?

1×10=10